

REMARKS

In the Official Action, the Examiner allowed independent claim 35 and claims 36-40 and 42-48 depending therefrom. With respect to the remaining claims, namely claims 1-3, 5-10, 13 and 17-34, the Examiner raised a rejection under the second paragraph of 35 U.S.C. §112 concerning the term "negative-type". The Examiner then rejected claims 1-3, 5-10, 13 and 17-21 under 35 U.S.C. §103(a) based on a combination of prior art documents, primarily including Hauck, U.S. Patent No. 6,555,291, and its published PCT counterpart. Independent claim 22 and claims 23-34 depending therefrom were not the subject of the prior art rejection.

By the present Amendment, the term "type" has been omitted to avoid the rejection under §112 without altering the scope of the claims and the term "negative" has been added to the preamble of the claims depending from independent claim 22 so that the preamble is similar to that for the claims depending from claim 1. It is well known in the art that a negative plate (which is also referred to as "negative-type" or "negative-working") provides a structure whereby upon exposure, the exposed portions become insoluble (typically by polymerization) in a developer which is used to remove the non-exposed portions. This understanding of negative plates is provided in the specification, such as on pages 20 and 21, and has been shown by the illustration attached to the previously submitted Amendment dated October 29, 2004. As explained in the remarks of the previous Amendment, the exposed portions are ink receptive and one advantage of the present invention is that a good inking property can be attained (see page 69 for an explanation of the

inking property evaluation). Moreover, independent claims 1 and 22 specifically recite that the photosensitive layer includes a light-to-heat conversion agent and a compound which is at least one of crosslinkable and polymerizable, with solubility of the photosensitive layer in an alkali developing solution being decreased by the effect of at least one of light and heat. Therefore, the claims themselves support a proper understanding of the term "negative" and when the claims are read in light of the specification, as they must be, it is clear that the metes and bounds of the claims are defined. Applicant accordingly respectfully submits that the claims are in full compliance with the provisions of 35 U.S.C. §112, second paragraph and requests withdrawal of this rejection.

Before addressing the rejection of claim 1 and the claims depending therefrom on prior art grounds, applicant notes that independent claims 1 and 22 have been further amended to recite that the defined negative planographic printing plate precursor is capable of directly making a printing plate using an infrared laser consistent with the teachings of the specification such as in the last paragraph on page 80 and to recite that the overcoat layer does not have sensitivity to an infrared layer consistent with the description provided on page 20 and claim 3 which has been accordingly canceled without prejudice or disclaimer along with dependent claim 24 that recites similar subject matter.

The invention defined in claim 1 and the claims depending therefrom are patentable over the cited prior art, particularly Hauck whether considered as the '291 patent or its PCT counterpart. Hauck relates to thermally imageable elements useful

as lithographic printing plates which comprises a support with a hydrophilic surface, an underlayer over the hydrophilic surface, and a top layer over the underlayer which contains a polymeric material, such as a novolac resin, a resol resin, or a mixture thereof, but does not require a compound that functions as a solubility-suppressing component for the polymeric material.

Hauck relates to a fundamentally different technology in that the patent provides a **positive**-type lithographic printing plate. This understanding is clear from the description provided at column 2, lines 1-3 wherein development with an aqueous alkaline developer is said to remove the **exposed** regions. Furthermore, the patent specifically refers to positive-working in the passage at column 13, lines 46-56 and again specifically refers to removal of the exposed regions by stating:

Imaging of the imageable element produces an imaged element, which comprises a latent image of imaged and unimaged regions. Developing the exposed element to form a developed element converts the latent image to an image by removing the exposed regions of the top layer and the underlayer, and exposing the hydrophilic surface of the underlying substrate. The element is **positive working, in that the underlayer and top layers are removed in the exposed regions when developed with the aqueous developer**. The exposed regions become the non-ink accepting regions. (emphasis in bold added)

Therefore, in contrast to the negative-type plate of the invention defined in claim 1, Hauck specifically relates to a positive-type plate. Applicant again notes that in the passage beginning at column 7, line 17, Hauck refers to a negative-working composition which is used for the underlayer. However, this discussion does not mean that the overall plate is negative-working. Instead, the underlayer is

polymerized after the plate is imagewise exposed and developed. This understanding of the underlayer is set forth in the paragraph bridging columns 15 and 16 of the patent.

To provide a greater understanding of the distinct nature of the precursor of claim 1 and the plate of Hauck, provided herewith is a further copy of the illustration of the respective systems that was submitted with the prior Amendment. This illustration shows that while the underlayer of Hauck is formed from a negative working composition, the plate itself is positive working as explicitly described in the aforementioned passage in column 13 of the patent. As such, the disclosed plate is fundamentally different from the negative-type planographic printing plate precursor of the present invention as defined in claim 1 and the claims depending therefrom.

As a further point of consideration, claim 1 now recites that the overcoat layer does not have sensitivity to an infrared layer. In contrast, Hauck discloses at column 12, lines 40-46 that infrared absorbing material can be present. Therefore, since Hauck is entirely different from the presently claimed invention, it cannot be used in any way as a basis for rejecting any of the claims of record.

The remaining cited documents have been relied on to show certain initiators. While applicant does not necessarily agree that the teachings of the documents can be properly combined, the proposed combinations of documents do not alter the fact that the plate of Hauck is entirely different from the defined precursor of claim 1 and any attempt to convert the disclosed positive working plate to a negative working plate would be contrary to the express teachings of the patent and therefore

improper. Accordingly, applicant respectfully submits that all the claims in the present application, including claim 1 and the claims depending therefrom, are patentable in all regards and therefore requests reconsideration an allowance of the present application.

Should the Examiner wish to discuss any aspect of the present application, she is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

BUCHAN INGERSOLL PC

By: Robert G. Mukai
Robert G. Mukai
Registration No. 28,531

P.O. Box 1404
Alexandria, Virginia 22313-1404
(703) 836-6620

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Image formation system		Under layer is cured by ...		Top layer solubility increase upon IR radiation
		IR radiation	UV radiation	
Hauck	<p><Positive type plate> Examples 1, 5 and 6</p> <p>Top layer Negative photosensitive layer • diazo resin • IR absorbing dye</p> <p><IR exposure> Solubility of top layer increases.</p> <p><Development> Exposed portion is dissolved.</p> <p><UV post-exposure> Underlayer is cured.</p>	Yes	No	Yes
The present invention	<p><Negative type plate></p> <p>Top layer Negative photosensitive layer • monomer, binder • IR absorbing dye</p> <p><IR exposure> Lower layer is cured.</p> <p><Development> Unexposed portions are dissolved.</p>	No	Yes	Yes

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